

Zervas School Site Plan – A better way forwards
Presented by: NHNAC Zervas Working Group

November 12, 2014



SCHEMATIC DESIGN PROGRESS – SITE PLAN

Zervas Elementary School – Newton, MA

September 5, 2014





Maintains 25'
wetland buffer

6.0 Acres (4.2 Useable)
78.8k SF Building

60k SF Play Areas
+ Outdoor Classroom
+ Outdoor Gardens

8k SF Plaza/Gathering
36+ Bike Storage
Dumpsters/Service

72 Parking Spaces
4 Bus Drop-Off
20 Car Drop-Off
(added drop-off lane)

SF Over 100' Setback*
10.9k Building (vs. 4.9k)
+7.9k Imperv. (vs. 20.4k)
+8.0k Porous Pavement
26.8k Total
+4.1k Porous Playground
Building is Out side 50' Buffer
All Paving is Outside 25' Buffer
*Per 2014 Flagged Wetlands

SCHEMATIC DESIGN – SITE PLAN

Zervas Elementary School – Newton, MA

5-58 Site Plan Approval Hearing – November 12, 2014



Design *partnership*
OF CAMBRIDGE

BIRCHWOOD
DESIGN GROUP

Zervas Plan “A” - Problems

Traffic Safety

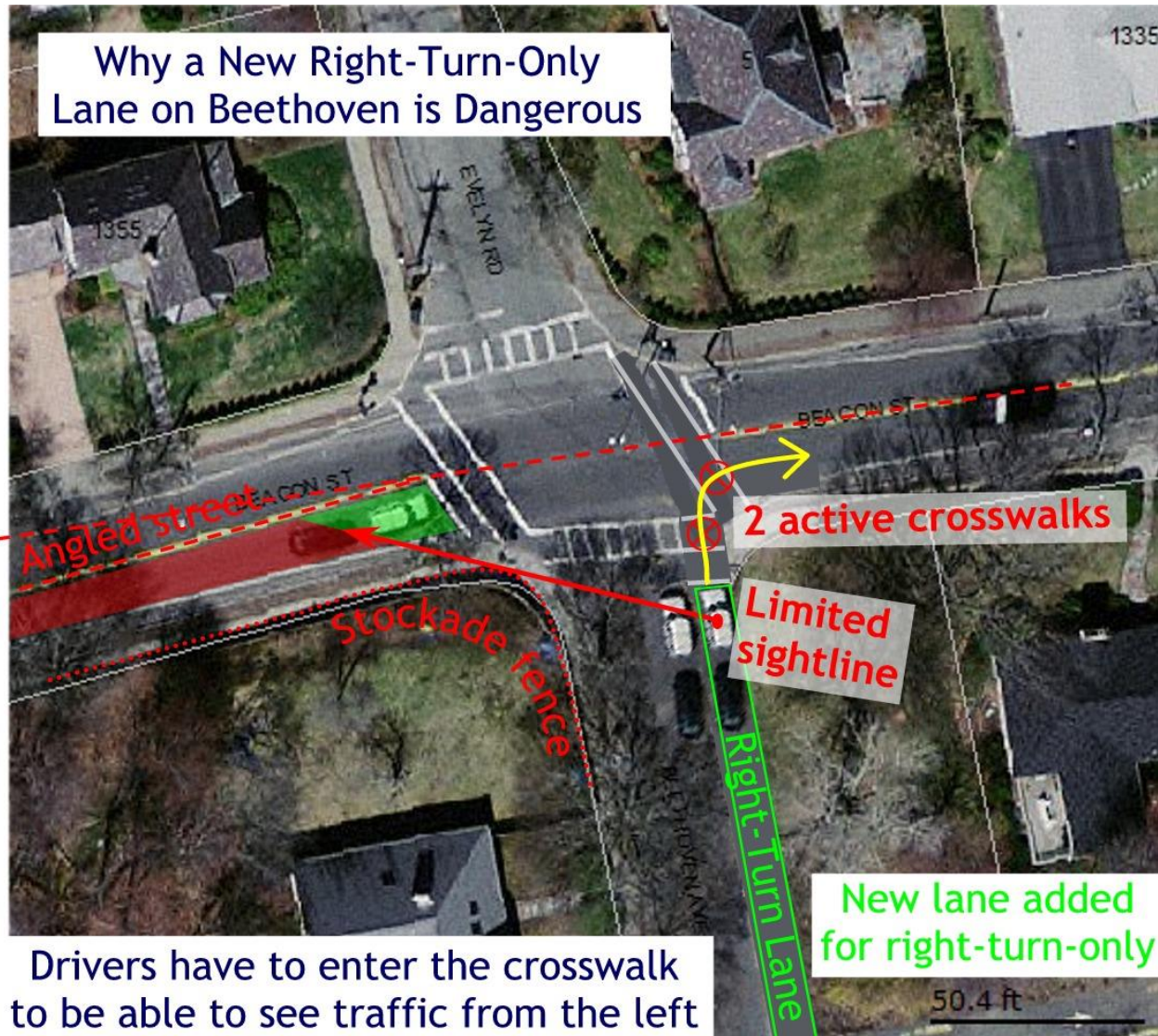
- Creates bottleneck on Beacon Street
- Multiple ingress/egress into parking lot
- Conflicts between cars and buses
- Vehicular entry and exit too close to Beethoven and to each other
- Conflicts with pedestrians

Zervas Plan “A” - Problems

Traffic Safety

- Widening of Beethoven Avenue facilitates fast driving and reduces safety of children
- Widening does not accommodate the majority of cars that will use the site, cars will be “double parked”
- Turning lane next to crosswalk allows cars to move faster, creating pedestrian conflicts

Zervas Plan "A" - Problems



Zervas Plan “A” - Problems

Open Space/Playfields

- Inadequate play space that is fractured between fields
- Play space reduced by expanded drop off lane on Beethoven and circuitous parking lot with multiple driveways
- Useful “green space” reduced by berms and thin strips of grass
- Gymnasium faces parking lot

Zervas Plan “A” - Problems

Wetlands problems

- Significant amount of building mass within 100 ft wetlands buffer with impervious surfaces
- Significant amount of roadways and parking within 100 ft and 50 ft buffer with impervious surface
- Unclear demarcation between wetlands and property lines

Zervas Plan “A” - Problems

Integration into residential neighborhood

- Demolition of homes changes residential streetscape
- Replacement of green space with asphalt parking lot in front setback of building
- Removal of multiple trees, clear cutting

Zervas Plan “A” - Problems

Orientation of building

- Building fractures play space between younger and older children (? Safety issue)
- Building turns its back on the children and those who walk and bike from the majority of the district (80%)
- North side entry will be in almost perpetual shade during the winter months with ice and snow

Zervas Plan “A” - Problems

Lack of windows (“fenestrations”)

- Significant increase in proportion of brick, concrete and other non-window façade
- Library with little day-lighting, even though it is on the north side
- Gymnasium and façade that faces public streets with little window space



SCHEMATIC DESIGN – VIEW FROM BEACON EXIT (EAST)

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Lower Veneer + Colonnade

SCHEMATIC DESIGN – END ELEVATION STUDY

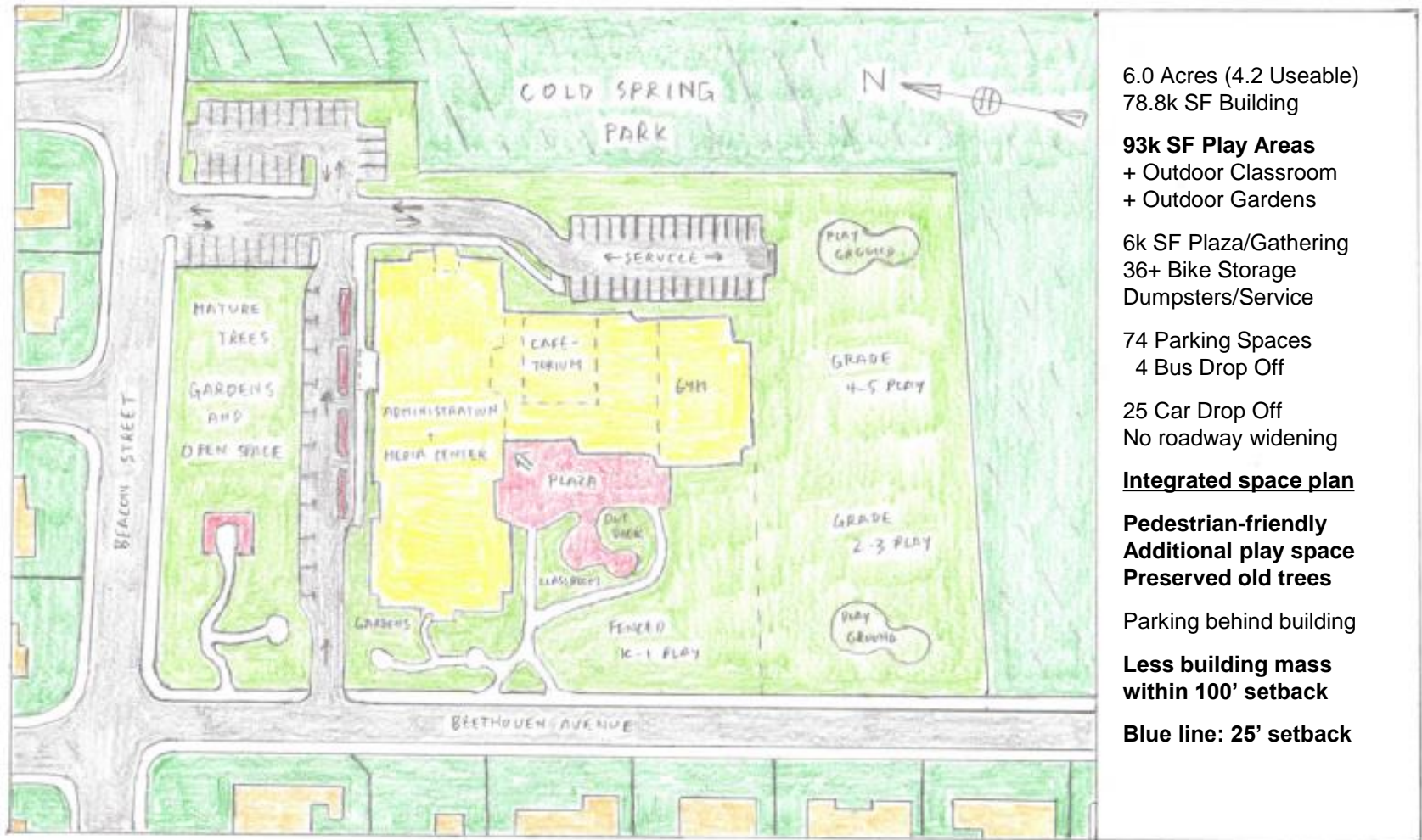
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Schematic Design Progress – Site Plan “C”

Zervas Elementary School – Newton, MA
 November 12, 2014

Newton Highlands
Neighborhood Area Council
Zervas Working Group

Zervas – NHNAC Working Group

Adopts exact specifications of building design

NHNAC Zervas Working Group: Proposed "Plan B" Site Plan (August 31, 2014)



Wing with cafeteria and gymnasium is shifted 16 ft forward

School opens to playing fields and not to teacher parking lot

School entry/exit points – secure and safe

Plan C

Meets all educational and programatic goals

Building size is the same as with the Project Team's plan

This is a school with 24 classrooms, modern gymnasium and cafeteria

All special education, media and conference rooms are included

Includes welcoming entry and plaza

2. Floor plans in the "Reverse-L" orientation used in Plan B

Zervas Plan “C” - Solutions

Traffic Safety

- Preserves traffic flow on Beacon Street, a major arterial in Newton with 10K vehicles per day
- Creates simple ingress/egress into parking area
- No conflicts between cars and buses entering site
- Vehicular entry and exit adequate distance from Beethoven and to each other
- Reduces conflict with pedestrians

Zervas Plan “C” - Solutions

Traffic Safety

- Save and slow Beethoven Avenue increaes safety of children
- Blue lane drop-off zone adequate and allow for drop offs on a slower and safer street
- Pedestrian crosswalk at Beacon-Evelyn maintains better safety without turning lane
- Consistent with sound traffic engineering and planning

Zervas Plan “C” - Solutions

Open Space/Playfields

- Creates increased play space that is contiguous between fields
- Play space increased by removing drop off lane on Beethoven and circuitous parking lot with multiple driveways
- Useful “green space” is increased to 93K SF
- Gymnasium faces playing fields

Zervas Plan “C” - Solutions

Orientation of building

- Play space between younger and older children is better integrated
- Building is oriented to those who walk and bike from the majority of the district (80%)
- South side entry will be on the sunny side of the building, which is favorable during the winter months when there is ice and snow

Zervas Plan “C” - Solutions

Wetlands proximity is respected

- Reduces amount of building mass within 100 ft wetlands buffer to negligible amount
- There is no parking within the 25 ft wetlands buffer
- Amount of building footprint within 100 ft wetlands setback is reduced by about 80%

Zervas Plan “C” - Solutions

Integration into residential neighborhood

- Residential streetscape on Beacon Street remains unchanged
- Green space in front setback of building, just like in current residential setting
- Preservation of multiple trees
- Façade with multiple windows respects historical appearance of school

Zervas Plan “C” - Solutions

Integration into residential neighborhood

- Other Newton school buildings have integrated well within their adjacent residential setting
- Some people will prefer to live nearby to the school and others won't
- No reason to believe that proximity of buildings will greatly affect property values
- Open parking lots with constant night lighting may decrease nearby real estate desirability

Zervas Plan “C” - Solutions

Provide more windows

- Current Zervas school has an almost continuous wall of glass windows on many of its facades
- Classrooms should have more of their exterior walls as windows
- Important for media center to have more windows so that students do not feel enclosed
- Parts of building oriented to public way should have more windows, including gymnasium



Current Zervas School:

Exterior walls have 70% windows

Provides for natural light and
enhances learning environment









SCHEMATIC DESIGN PROGRESS – EXISTING AERIAL

Zervas Elementary School – Newton, MA

September 5, 2014



Existing Zervas ES

A1.0

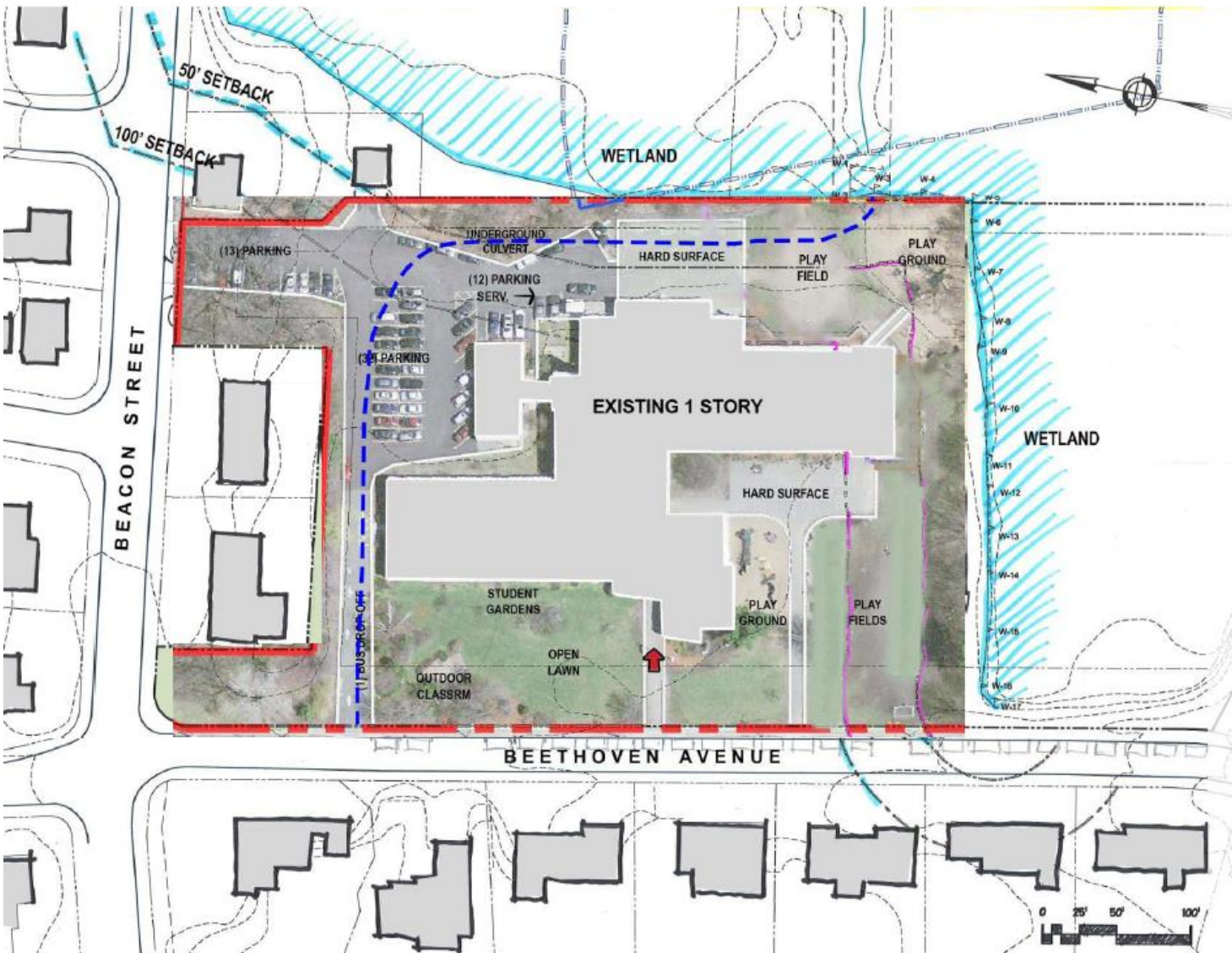
**1 Story Pinwheel Plan
with Parking Behind**

Total Site = 5.3 acres*
Usable = 3.5 acres**
Parking = 57 spaces
Drop-Off = 1 bus/0 car
(+ Beethoven Ave)

Play Areas = 43k SF

*acreage obtained from the
City Tax Assessor's web-site

**includes usable areas within
wetland buffers. The amount
of paving allowed within the
buffers is at the discretion of
the Conservation Commission



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FEBRUARY 27, 2014



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